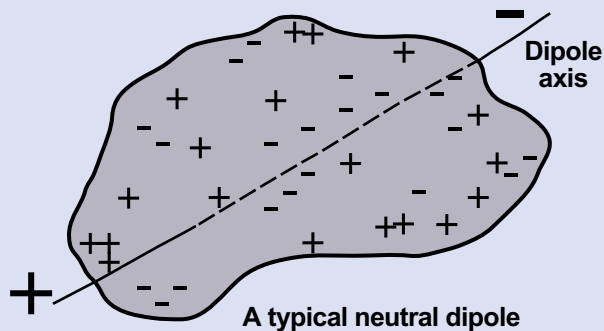
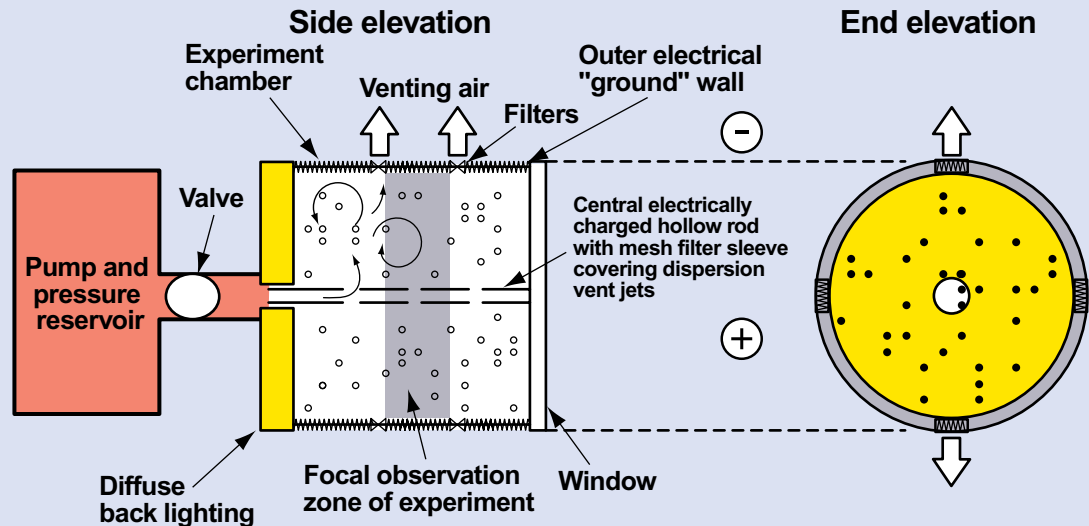


Glenn Research Center

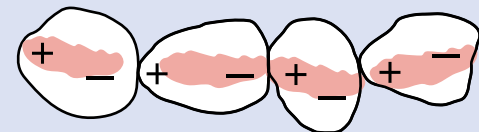


Electrostatics of Granular Materials

- Optical measurements of positions of single grains in a dilute disperse cloud as they oscillate in a slowly alternating inhomogeneous E-field
- Apply 2-d E-field
- Video imaging of particles to track 3-d particle motion
- Measure the average electric charge of the grain/particle cloud
- Monitor RF signals from the test chamber



Aggregates formed from discrete dipoles on each grain



Aggregates formed from dipole couplets of monopoles

